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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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09/475,713 12/30/99 ZUNIGA M 09464-010001

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| EXAMINER |
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MMC2/0911

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| RILEY, S | |
| ART UNIT | PAPER NUMBER |

2838
DATE MAILED:

7
09/11/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/475,713

Applicant(s)

ZUNIGA ET AL.

Examiner

Shawn Riley

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.

Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 15-18 is/are rejected.
- 7) ☒ Claim(s) 19 and 20 is/are objected to.
- 8) ☒ Claims 11-14 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) ____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

DETAILED ACTION

1. Applicant's election with traverse of group I in Paper No. 6 is acknowledged. The traversal is on the ground(s) that the claims are not limited to a voltage regulator with only a single transistor and the inventions are not unrelated but are useable together as shown in figure 5. This is not found persuasive because figure 5 has nothing to do with the first and second groups being used as combination/subcombination. Figure 5 merely shows the fractional power loss as a function of device width of an NMOS operating at either 5 or 12 volts at the gate. Further, the previous office action made no reference to a combination/subcombination as rationale for the restriction. The restriction was based on unrelated invention, that is they are not disclosed as being used together. Applicants do not disclose a first regulator with a single transistor in series/parallel with a second regulator having two transistors (i.e., multiple regulators – not multiple transistors in a single regulator).

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 U.S.C. § 112

1. Claims 3, 4, 8 and 18 (and therefore claims 5-7 and 9-10) are rejected under 35 U.S.C. § 112, 2nd paragraph,

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

In claims 3, 4, and 18, the recitation of the “first voltage” lacks antecedent basis.

In claim 3 and 18 the recitation of the “second voltage” lacks antecedent basis.

In claim 8 the “drive train” of the first and second transistors is not understood. Do applicants mean to refer to a driver circuit, i.e., a driver?

Claim Rejections - 35 U.S.C. § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2 and 15-17, and as far as understood claims 3-10 and 18 are rejected under 35 U.S.C. §102(b) as being fully anticipated by Plumton (U.S. Patent 5,554,561). Plumton shows, (in, e.g., figure 3b and the corresponding disclosure) a first and second transistor, a controller and a filter disposed between the input and the output wherein the first transistor is a PMOS and the second transistor is an NMOS compatible with a logic voltage wherein the first transistor includes a first gate oxide layer and the second transistor includes a second gate oxide layer, the first gate oxide layer is thicker than the second gate oxide layer.

Allowable Subject Matter

4. Claims 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. As allowable subject matter has been indicated, applicant's response must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 C.F.R. § 1.111(b) and section 707.07(a) of the M.P.E.P.

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Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hallberg et al. (U.S. Patent 5,959,442) see particularly figures 1 and 2 and the corresponding disclosure and Ohsawa (U.S. Patent 4,906,914) show voltage regulators see particularly figure 5 and the corresponding disclosure and Lim (U.S. Patent 5,929,680) see particularly claim 1 especially i)4.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Riley whose telephone number is 703.305.3487. The Examiner can normally be reached Monday through Thursday from 7:30-6:00 p.m. Eastern Standard Time. The fax phone number for this Group is 703.305.7731 or 7732. Any inquiry of a **general nature** or relating to the **status** of this application or proceeding should be **directed to the Group receptionist** whose telephone number is 703.308.1782.



Shawn Riley
Primary Examiner